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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/509,409	09/23/2004	Christoph Gerard August Hoelen	NL 020264	8032

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BRIARCLIFF MANOR, NY 10510

EXAMINER

LEE, Y'MY QUACH

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2885

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/509,409

**Applicant(s)**

HOELEN ET AL.

**Examiner**

Y M. Lee

**Art Unit**

2885

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 November 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 3, 7-9, 11-15, 17-19 and 21-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1, 3, 9, 11, 13-15 and 21 is/are allowed.
- 6) ☒ Claim(s) 17-19 and 22-27 is/are rejected.
- 7) ☒ Claim(s) 7, 8 and 12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

***DETAILED ACTION***

***Response to Arguments***

1. The indicated allowability of claims 17 to 19 and 21 is withdrawn in view of the references to Nakabayashi et al. and Ohsumi. Rejections based on the cited references follow. It should be noted that the foreign priority document of 02076206.8 does not disclose subject matter that are directed to figures 4 and 5 of the present application. Therefore, any subject matter directed to figures 4 and 5 of the present application does not have an effective filing date of March 28, 2002.

***Claim Objections***

2. Claims 7, 8, 18 and 19 are objected to because of the following informalities: In claim 7, the term “the widening section” lacks a clear antecedent basis. According to claim 1, there are “first widening section” and “second widening section”, which “widening section” is “the widening section” of claim 7 referring to? In claim 18, lines 13 and 16, the term “widening section” lacks a clear antecedent basis. There are “first widening section” and “second widening section”, which “widening section” is “the widening section” on lines 13 and 16 referring to? In claim 18, the language “a light guide part providing directional light extraction” is misdescriptive and or inaccurate. According to the specification, page 14, lines 13 to 18, the rear wall of the light emitting panel 1 is provided at the bidirectional light extracting light guide part 120 with a structure 30 (multiple steps 130 substantially parallel to the front wall figure 4 or structure 30 figure 5) to extract light by disrupting total internal reflection locally. In view of this description, the structure 30 extracts light, and the light guide part without the structure is not providing bidirectional light extraction. Claim 8 depends on claim 7 and as such is also objected. Claim 19 depends on claim 18 and as such is also objected. Appropriate correction is required.

3. Claim 12 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim 1. Claim 1 is directed to drawing figure 5, which claims a first widening section, a second widening section, between the first widening section and the second edge surface, a light guide part including a structure configured for providing light extraction, and the second edge surface specularly or diffusely reflecting. However, claim 12 depending on claim 1 claims that the structure is formed by a multitude of steps ...” There are no multiple steps between the first widening section and the second edge

while the second edge is specularly or diffusely reflecting with the second widening section from the second edge in a direction toward the first edge. Applicant is required to cancel the claim or amend the claim(s) to place the claim(s) in proper dependent form.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 22 to 24 and 27 are rejected under 35 U.S.C. 102(e) as being anticipated by Nakabayashi et al. (prior art previously cited).

Nakabayashi et al. show a front wall (321, 322), a rear wall (311, 312) situated opposite to the front wall, a first edge surface (figure 23c, one of the edge surfaces) for receiving incident light, a second edge surface opposite the first edge surface, wherein the rear wall includes a structure (243) configured for providing light extraction, the lighting panel widens over a first widening section from the first edge surface in a direction towards the second edge surface (figure 23c), and widens over a second widening section from the second edge surface in a direction towards the first edge surface (figure 23c), a light source (212) for providing the incident light, a further light source (211) for providing a further incident light incident on the second edge surface, and a thickness of the lighting panel is largest at a center of the lighting panel (figure 23c).

6. Claims 22 and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by Kuo.

Kuo shows a front wall (50), a rear wall (65) situated opposite to the front wall, a first edge surface (figures 3, 4, 5, one of the edge surfaces 68) for receiving incident light, a second edge surface opposite the first edge surface (figures 3, 4, 5, other of the edge surfaces 68), wherein the rear wall includes a structure (66, 67) configured for providing light extraction, the lighting panel widens over a first widening section from the first edge surface in a direction towards the second edge surface (figures 3, 4, 5), and widens over a second widening section

from the second edge surface in a direction towards the first edge surface (figures 3, 4, 5), and wherein the second edge surface is specularly reflecting (3).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 17 is rejected under 35 U.S.C. 102(e) as being anticipated by Nakabayashi et al. (prior art previously cited) in view of Ohsumi (prior art previously cited).

Nakabayashi et al. disclose a front wall (321, 322), a rear wall (311, 312) situated opposite to the front wall, between the front and rear wall a first edge surface (figure 23c, one of the edge surfaces) being light transmitting, a second edge surface opposite the first edge surface, a first light source (212) associated with the first edge surface such that in operation light originating from the first light source is incident on the first edge surface and distributes itself in the panel, wherein the lighting panel widens over a first widening section from the first edge surface in a direction towards the second edge surface (figure 23c), and widens over a second widening section from the second edge surface in a direction towards the first edge surface (figure 23c), the rear wall is provided over the widening section with a multiplicity of steps (243), the second edge surface is light transmitting, and a second light source (211) associates with the second edge surface such that in operation light originating from the second light source is incident on the second edge surface and distributes itself in the panel. However, Nakabayashi et al. do not disclose that the multiplicity of steps is substantially parallel to the front wall.

Ohsumi teaches structure including a multiplicity of steps (14E) having surfaces that face the front wall and substantially parallel to the front wall of the lighting panel to provide uniform illumination from the front wall (figure 2).

It would have been obvious one skilled in the art to modify the steps of Nakabayashi et al. with the steps substantially parallel to the front wall, as shown by Ohsumi, so that the light intensity of the emission from the front wall can be uniformized.

9. Claims 18 and 19 are rejected under 35 U.S.C. 102(c) as being anticipated by Nakabayashi et al. (prior art previously cited) in view of Ohsumi (prior art previously cited).

Nakabayashi et al. disclose a front wall (321, 322), a rear wall (311, 312) situated opposite to the front wall, between the front and rear wall a first edge surface (figure 23c, one of the edge surfaces) being light transmitting, a second edge surface opposite the first edge surface, a first light source (212) associated with the first edge surface such that in operation light originating from the first light source is incident on the first edge surface and distributes itself in the panel, wherein the lighting panel widens over a first widening section from the first edge surface in a direction towards the second edge surface (figure 23c), and widens over a second widening section from the second edge surface in a direction towards the first edge surface (figure 23c), the rear wall is provided over the widening section with a multiplicity of steps (243), the second edge surface is light transmitting, a second light source (211) associates with the second edge surface such that in operation light originating from the second light source is incident on the second edge surface and distributes itself in the panel, the light emitting panel comprises between the widening section and the second edge, and a light guide part providing bidirectional light extraction (243). However, Nakabayashi et al. do not disclose that the multiplicity of steps is substantially parallel to the front wall.

Ohsumi teaches structure including a multiplicity of steps (14E) having surfaces that face the front wall and substantially parallel to the front wall of the lighting panel to extract light by disrupting total internal reflection locally and for providing uniform illumination from the front wall (figure 2).

It would have been obvious one skilled in the art to modify the steps of Nakabayashi et al. with the steps substantially parallel to the front wall, as shown by Ohsumi, so that the light intensity of the emission from the front wall can be uniformized.

10. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakabayashi et al. (prior art previously cited) in view of Ohsumi (prior art previously cited).

Nakabayashi et al. disclose the invention substantially as claimed with the exception of disclosing that the structure includes a multiplicity of steps having surfaces that face the front wall and are substantially parallel to the front wall.

Ohsumi teaches structure including a multiplicity of steps (14E) having surfaces that face the front wall and substantially parallel to the front wall of the lighting panel to provide uniform illumination from the front wall (figure 2).

It would have been obvious one skilled in the art to modify the structure of Nakabayashi et al. with the steps having surfaces that face the front wall and substantially parallel to the front wall, as shown by Ohsumi, so that the light intensity of the emission from the front wall can be uniformized.

11. Claims 1, 3, 9, 11, 13 to 15 and 21 are allowed.
12. Claims 7, 8 and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Y Quach Lee whose telephone number is 571-272-2373. The examiner can normally be reached on Monday to Thursday from 8:30 am to 2:30 pm.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the customer service 571-272-2815.

Y. Q.  
February 10, 2009

/Y M. Lee/  
Primary Examiner, Art Unit 2885